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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,421	08/05/2003	Michael G. Fisher	0003-033P1	7908
40972	7590	09/29/2005		
HENNEMAN & SAUNDERS 714 WEST MICHIGAN AVENUE THREE RIVERS, MI 49093			EXAMINER HOPKINS, ROBERT A	
			ART UNIT 1724	PAPER NUMBER
DATE MAILED: 09/29/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/634,421

Applicant(s)

FISHER ET AL.

Examiner

Robert A. Hopkins

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-35 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 12-29,34 and 35 is/are allowed.
6) ☒ Claim(s) 1,2,4-11 and 30-32 is/are rejected.
7) ☒ Claim(s) 33 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,2,4,5 and 8-11 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Van Abbema(4572726).

Van Abbema teaches a pump for moving a product comprising a separating apparatus(20), an air pump(10) for providing a vacuum to the separating apparatus, a pressure valve apparatus(air lock device not shown; column 4 lines 20-26) for allowing the product to be removed from the separating apparatus, and a blower(10) for blowing the product out of the air pump. Van Abbema further teaches wherein the separating apparatus is a cyclone separator. Van Abbema further teaches wherein the forced air source and vacuum source are a single air pump. Van Abbema further teaches wherein the pressure valve apparatus is a rotary dump valve.

Examiner also notes the amendment to claims 9-11 does not further define structure of a structural element defined in the body of claim 1, and therefore claims 9-11 are an intended use and are not given patentable weight.

Claim 30 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Van Abbema(4572726).

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Van Abbema teaches a method for moving a product comprising drawing the product into a chamber(20) via vacuum(10), drawing gasses from the chamber(outlet duct 13) via vacuum to separate the gasses from the product, and pushing the product from the chamber(outlet duct 12) via compressed gasses(from vacuum 10).

Claim 31 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Van Abbema(4572726).

Van Abbema teaches a pump comprising means(10) for drawing a product and gas mixture into a chamber(20), means(20) for separating the product from the gas, and means(10) for removing the product from the chamber.

Claim 32 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Van Abbema(4572726).

Van Abbema teaches a pump comprising a chamber(20), an inlet port(11) coupled to the chamber to facilitate the flow of product into the chamber, an outlet port for discharging the product from the pump, a vacuum port(13) coupled to the chamber, a vacuum source(10) coupled to the vacuum port to provide a negative pressure in the chamber, whereby the product can be drawn into the chamber through the inlet port, a pressurized gas source(10), and a mixing valve(air lock device not shown; column 4 lines 20-26) coupled to the chamber, the outlet port, and the pressurized gas source, whereby the product can be pushed out the outlet port by the pressurized gas(column 4 lines 45-47).

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Abbema(4572726).

Van Abbema teaches all of the limitations of claims 6 and 7 but is silent as to a cooling apparatus and demister. Cooling apparatus and demisters are common structures for use with a cyclone separator, therefore it would have been obvious to someone of ordinary skill in the art at the time of the invention to provide a cooling apparatus to decrease the temperature of the airflow from the forced air source(10), and a demister for removing moisture from an airflow when the airflow includes a source of liquid.

Allowable Subject Matter

Claims 12-29,34, and 35 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Examiner notes claim 12 sufficiently connects the limitations to the wet wine product in the body of claim 12 to the wet wine product in the preamble of claim 12, and since Van Abbema fails to teach separating a wet wine product from air, claim 12 is

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deemed to include allowable subject matter. Claims 13-22 and 34 depend on claim 12 and hence are also allowed.

Examiner notes claim 23 recites a method for moving a wet wine product, and as persuasively noted by applicant, the combination of Koehn and Van Abbema fails to teach the limitations of claim 23. Claims 24-29 and 35 depend on claim 23 and hence are also allowed.

Claim 33 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 33 recites "further including an inlet valve disposed in the separating apparatus near the pressure valve apparatus, whereby gas entering the separating apparatus via the inlet valve agitates the product to prevent blockage of the pressure valve". Van Abbema fails to teach an inlet valve disposed in the separating apparatus near the pressure valve apparatus. It would not have been obvious to someone of ordinary skill in the art at the time of the invention to provide an inlet valve disposed in the separating apparatus near the pressure valve apparatus, whereby gas entering the separating apparatus via the inlet valve agitates the product to prevent blockage of the pressure valve because Van Abbema does not suggest such a modification.

Response to Arguments

Applicant's arguments filed 8-8-05 have been fully considered but they are not persuasive..

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Applicant argues applicant's invention is designed to transport a liquid – solid mixture in general, and wine must or pomace in particular. Applicant argues the fan of Van Abbema would be incapable of moving this type of heavy wet product. Applicant further argues a fan has a different definition than a pump.

Examiner respectfully submits that transporting a liquid solid mixture is not recited in claim 1. Claim 1 only recites “moving a product”. Also, since the claim is an apparatus claim, patentability is based on the structural limitations in the body of the claim, and not on the intended use of the structure. Examiner furthermore notes that claim 5 recites that the air pump and blower are the same air pump. Examiner furthermore respectfully submits that the definition of fan and blower are the same according to Websters Collegiate Dictionary, specifically “ a device for producing a current of air or gas”. Therefore, the “fan” of Van Abbema would provide the same current of gas as the blower recited in the current claims, and would clearly be capable of moving the product away from the product outlet. Examiner also notes Van Abemma(4580928), cited only as of reference, clearly shows the same system setup as Van Abemma(4572726), and uses the term “air pump” to describe item 10 in figure 1. Also, Finnegan(2622341), also cited only as of reference, clearly uses the terms “fan” and “blower” interchangeably(column 2 lines 40-41) in a system for blowing a product away from a separator product outlet.

Applicant argues with respect to claim 30 that Van Abbema does not disclose a step of “pushing the product from said chamber via compressed gases”. Examiner respectfully submits that Van Abbema teaches a fan, and the definition of fan and

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blower are the same according to Websters Collegiate Dictionary, specifically “ a device for producing a current of air or gas”. Examiner also notes that in the current specification, page 9 lines 20-21, the air pump is described as including a blower which pressurizes and expels air. Examiner respectfully submits that the fan in Van Abbema clearly compresses and pressurizes the airflow as does the blower in the current drawings, and therefore the fan is clearly capable of pushing a product from a chamber via compressed gases. Examiner notes the setup of the separator, fan, and product outlet are clearly the same as the setup of the separator, blower, and product outlet in figure 4 of the current drawings. Examiner also notes the “fan” of Van Abbema is clearly enclosed within a casing which includes an air inlet and an air outlet, which is clearly equivalent to the air pump in figure 4 of the current drawings which includes a blower within a casing and an air inlet and an air outlet. Examiner respectfully submits the product outlet in Van Abbema is clearly in a linear relationship with the fan, and conduit 12 extends past the product outlet, therefore in order to move the product away from the product outlet, the fan has to compress and pressurize the gas from outlet 13 and push the product away from the product outlet.

Applicant argues with respect to claim 31 that nothing in Van Abbema can be fairly characterized as an equivalent to the “means for drawing a product and gas mixture into a chamber” and the “means for removing the product from the chamber” disclosed in Applicant's specification. Applicant further argues that applicant's specification discloses an air pump as a means for drawing (under vacuum) a wine product and gases into a vacuum chamber, and in contrast Van Abbema discloses a fan

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for drawing low mass particulate matter into a cyclone separator and for blowing the particulate matter out the outlet duct. Examiner respectfully submits that claim 31 fails to recite a "wine product" as argued by Applicant. Furthermore, the "means for drawing a product and gas mixture into a chamber" and "means for removing the product from the chamber" is the fan of Van Abbema. As noted with respect to previous claims, the definition of fan and blower are the same according to Websters Collegiate Dictionary, specifically " a device for producing a current of air or gas". Because the air pump of the current specification uses a blower, the fan of Van Abbema can clearly be classified as an air pump. Examiner notes the setup of the separator, fan, and product outlet are clearly the same as the setup of the separator, blower, and product outlet in figure 4 of the current drawings. The product outlet in Van Abbema is clearly in a linear relationship with the fan, and conduit 12 extends past the product outlet, therefore in order to move the product away from the product outlet, the fan has to compress and pressurize the gas from outlet 13 and push the product away from the product outlet. Examiner also notes Van Abemma(4580928), cited only as of reference, clearly shows the same system setup as Van Abemma(4572726), and uses the term "air pump" to describe item 10 in figure 1. Also, Finnegan(2622341), also cited only as of reference, clearly uses the terms "fan" and "blower" interchangeably(column 2 lines 40-41) in a system for blowing a product away from a separator product outlet.

Applicant argues with respect to claim 32 that the fan of Van Abbema is not "a compressed gas source" nor does it provide "pressurized gasses". Examiner respectfully submits that , as noted with respect to previous claims, the definition of fan

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and blower are the same according to Websters Collegiate Dictionary, specifically “ a device for producing a current of air or gas”. Because the air pump of the current specification uses a blower, the fan of Van Abbema can clearly be classified as an air pump. Examiner notes the setup of the separator, fan, and product outlet are clearly the same as the setup of the separator, blower, and product outlet in figure 4 of the current drawings. The product outlet in Van Abbema is clearly in a linear relationship with the fan, and conduit 12 extends past the product outlet, therefore in order to move the product away from the product outlet, the fan has to compress and pressurize the gas from outlet 13 and push the product away from the product outlet. Examiner furthermore notes that the system of Van Abbema is a pneumatic conveying apparatus, which by definition moves a product by air pressure. Also, Finnegan(2622341), also cited only as of reference, clearly uses the terms “fan” and “blower” interchangeably(column 2 lines 40-41) in a system for blowing a product away from a separator product outlet.

Examiner notes the with regard to claim 1, the product could be interpreted as being either a dry or wet product. Examiner notes claim 12 recites separating a wet wine product from air. Therefore, examiner notes amendment of claim 1 to include a wet product within both the preamble and the body of the claim, along with limitations that the air pump provides a vacuum source sufficient to draw the wet product to the separating apparatus and the blower is sufficient to blow a wet product out of the pump would seem to overcome Van Abbema, which clearly is only designed for moving a dry product, and wherein the fan of Van Abbema would not have the vacuum source which

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is sufficient to move a wet product. Examiner also notes in the current specification that on page 9 lines 15-16 that the air pump to be used for moving the product is rated at 40 horsepower. Examiner notes that Van Abbema clearly does not recite an amount of horsepower required to move the product through the system, therefore a claim dependant on claim 1 which includes a horsepower amount for the air pump and/or an independent claim which recites the above suggested limitations and includes a horsepower amount for the air pump would also overcome the system of Van Abbema. Examiner notes that Finnegan includes a heater to remove moisture which clearly teaches against moving a wet product through the system.

Examiner notes the with regard to claim 30, the product could be interpreted as being either a dry or wet product. Examiner notes claim 23 includes limitations to moving a wine product, wherein the wine product is clearly a wet product. Therefore, examiner notes amendment of claim 30 to include a wet product within both the preamble and the body of the claim, along with limitations that the vacuum is sufficient to draw a wet product into a separating chamber and the vacuum is sufficient to push the wet product from the separating chamber would seem to overcome Van Abbema, which clearly is only designed for moving a dry product, and wherein the fan of Van Abbema would not have the vacuum source which is sufficient to move a wet product. Examiner notes that Finnegan includes a heater to remove moisture which clearly teaches against moving a wet product through the system.

Examiner notes that with regard to claim 31 that the product could be interpreted as being either a dry or wet product. Therefore, amendment of claim 31 to differentiate

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the equivalents in the specification to only being able to draw a wet product and gas mixture and remove a wet product from the chamber would seem to overcome Van Abbema, which clearly is only designed for moving a dry product, and wherein the fan of Van Abbema would not have the vacuum source which is sufficient to move a wet product. Examiner notes that Finnegan includes a heater to remove moisture which clearly teaches against moving a wet product through the system.

Examiner notes that with regard to claim 32 that the product could be interpreted as being either a dry or wet product. Therefore, examiner notes amendment of claim 1 to include a wet product within both the preamble and the body of the claim, along with limitations that the vacuum source is sufficient to draw the wet product to the chamber and the pressurized gas source is sufficient to blow a wet product out of the outlet port would seem to overcome Van Abbema, which clearly is only designed for moving a dry product, and wherein the fan of Van Abbema would not have the vacuum source which is sufficient to move a wet product. Examiner notes that Finnegan includes a heater to remove moisture which clearly teaches against moving a wet product through the system.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

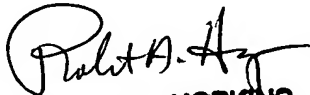
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert A. Hopkins whose telephone number is 571-272-1159. The examiner can normally be reached on Monday-Friday, 7am-4pm, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rah
September 27, 2005


ROBERT A. HOPKINS
PRIMARY EXAMINER
A.U. 1724